AMENDMENTS

TO THE SPECIFICATION

1. Please replace the paragraph beginning at line 13 page 2 with the following amended paragraph:

One form of piezoelectric composite transducer consists of piezoelectric rods, tubes, or rectangular bars oriented parallel to one another but spaced apart so as to be surrounded and bounded together by an epoxy matrix filler. This composite arrangement may be formed in the shape of a square or rectangular plate or a circular disk whose ~~sound-radiating~~ **sound-radiating** face is the surface of the plate or disk. The embedded piezoceramic elements are oriented perpendicular to the sound radiating face.

2. Please replace the paragraph beginning at line 22 page 2 with the following amended paragraph:

Another form of composite piezoelectric transducer is comprised of piezoceramic plates having a rectangular shape arranged parallel to one another but separated by epoxy bonding layers. This laminated composite array of piezoceramic plates and epoxy layers forms a square or rectangular plate whose ~~sound-radiating~~ **sound-radiating** face is the surface of the plate. The edges of the piezoceramic plates are oriented perpendicular to the ~~sound-radiating~~ **sound-radiating** face.

3. Please replace the paragraph beginning at line 3 page 3 with the following amended paragraph:

In the first described composite transducer, the cross-axis polarization piezoelectric coefficients of the piezoceramic material ~~governs~~ **govern** the acoustical operation. The piezoceramic rods are usually polarized along their length axis (oriented perpendicular to the radiating face). Improved performance characteristics are achieved by the lateral volume expansion and contraction of the piezoceramic elements acting on the surrounding epoxy matrix, giving rise to displacements and sound radiation normal to the face.

4. Please replace the paragraph beginning at line 7 page 4 with the following amended paragraph:

An example of an application for the transducer ~~in~~ is for precision quantitative measurement of diluent gases, such as nitrogen and carbon dioxide, in natural gas mixtures. It may be further used to accurately measure the speed of sound in such gas mixtures.